U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT RECORD OF DECISION DESOLATION FLATS NATURAL GAS FIELD DEVELOPMENT PROJECT SWEETWATER & CARBON COUNTIES, WYOMING

INTRODUCTION

In 1999 several operators, including Marathon Oil Company, submitted a proposal to the Bureau of Land Management (BLM) to conduct exploratory drilling and development of up to 592 wells during the next 20 years within the area known as Desolation Flats. The Desolation Flats Natural Gas Field Development Project area is approximately 233,542 acres and is located within the administrative jurisdictions of the BLM Rawlins and Rock Springs Field Offices in Sweetwater and Carbon Counties, south of Wamsutter, Wyoming. The EIS for the Desolation Flats Natural Gas Field Development Project Area (DFPA) analyzes a proposal by Marathon Oil Company, Cabot Oil and Gas Company and other leaseholders to drill additional development infill and exploratory wells on their leased acreage within the DFPA of south central Wyoming.

The Great Divide Resource Management Plan (RMP) (1990) and the Green River RMP (1997) provide the general guidance for the Desolation Flats area. Approximately 94 percent of the DFPA is guided by the Great Divide RMP and the remaining 6 percent is guided by the Green River RMP. Both RMPs designated the respective portions of the DFPA as open to oil and gas leasing and development. An existing network of roads, including roads built to BLM standards and other roads of varying quality and use, exist in the DFPA.

Under the Green River RMP, the Adobe Town Wilderness Study Area (WSA) was delineated and described as having wilderness characteristics. The DFPA shares a common boundary with the Adobe Town WSA which lies to the west of the DFPA. The administrative boundary between Rawlins Field Office and Rock Springs Field Office distributes management of Adobe Town WSA between the two BLM offices, with the Green River RMP providing the overall guidance. DFPA is also within a larger area known as the "Greater Green River Basin", an immense geographical area of southwestern Wyoming. The Greater Green River Basin currently has a large number of existing and proposed oil and gas developments.

Originally the oil and gas development proposed by the Marathon Oil Company and other operators (the Operators) included up to 592 wells and associated production and transmission systems. Subsequently the composition of the leasehold ownership changed and the proposal was modified to focus on exploration and drilling in the most economically and technically feasible portions of the DPFA. With this modification the Proposed Action alternative focused on exploration and development of the most economical and technically feasible portions of the DFPA. The Proposed Action alternative proposed up to 385 wells and associated production and transmission facilities. The EIS analyzes the impacts of three alternatives: the Proposed Action as redefined by Cabot Oil Company and other Operators; Alternative A an alternative that examines the original proposal as submitted in 1999, and Alternative B, the no-action alternative.

The FEIS was conducted and prepared under the authorities of the National Environmental Policy Act of 1969 and regulations, 40 Code of Federal Regulations (CFR) Part 1500-1508 and the Federal Land Policy and Management Act of 1976 (FLPMA).

DECISION

The decision is to select and approve the Proposed Action as described in the EIS. This decision is consistent the approved Great Divide Resource Management Plan (1990) and the Green River Resource Management Plan. Standard oil and gas leasing stipulations addressing compliance with the basic requirements of environmental statutes. This decision is not the final approval for the actions associated with the Proposed Action alternative. Prior to issuing any permit or authorization to implement these activities on the BLM-administered lands, the BLM must analyze each component of the Proposed Action on a site-specific basis and subject to NEPA. These permits and authorizations include but are not limited to: Application for Permit to Drill (APD), Notice of Staking, Right of Way Grant or Special Use Permit.

REASONS FOR THE DECISION

My reasons for selecting the Proposed Action with minor modifications are as follows.

- We are satisfied that the decision to approve the Desolation Flats gas field development
 as proposed by the Operators and with minor modifications through the use of mitigation
 measures and best management practices is in conformance with the BLM land use plans
 covering the DFPA.
- The Desolation Flat Project EIS was prepared in response to leaseholders desiring to exercise the terms and conditions of their respective oil and gas leases in the project area. The environmental impacts of this decision were fully disclosed in the Draft and Final EISs. Opportunities for public involvement and BLM responses to public comment are also disclosed
- Three key issues were identified: cumulative impacts to air quality; impacts to the Adobe
 Town Wilderness Study Area; and impacts from gas field development and activities on
 wildlife habitat.
 - O Air Quality. Concerns were expressed by other Federal agencies including Environmental Protection Agency (EPA), U.S.D.A. Forest Service and the State of Wyoming regarding the impacts to air quality and specifically to visibility in Class I Airsheds, and additional emissions that would contribute to regional haze. These concerns were addressed through air quality near-field and far-field modeling and analyses. Air quality models predicted that the activities associated with the Desolation Flat gas field development individually would not produce adverse direct visibility impacts. However, DFPA activities would contribute to the cumulative impacts when considered with other oil and gas projects in production or proposed nearby. Because of the lesser level of development and activities proposed comparatively the impacts of the Proposed Action were

- slightly less than those estimated for Alternative A both directly and cumulatively. The BLM in cooperation with the above mentioned agencies will continue to monitor air quality impacts both locally and regionally. Mitigation measures and monitoring requirements are included and attached to this Decision.
- Adobe Town Wilderness Study Area (WSA). Conservation groups requested that BLM consider a citizens' proposal for additions to the Adobe Town WSA, a portion of which is included and adjacent to the DFPA. This alternative was considered and eliminated from detailed study. The majority of the Desolation Flats project area is leased for oil and gas and some infrastructure from previously authorized oil and gas operation exists. To protect the scenic characteristics of the WSA, visual resources best management practices will be applied within the DFPA as appropriate, through Conditions of Approval provisions associated with APDs and other authorizing instruments.
- Wildlife Habitat. The effects of development to big game crucial winter range, raptors, mountain plover and greater sage grouse were of concern to Biodiversity Conservation Alliance and National Wildlife Federation. Their concerns centered on the adequacy of present standard mitigation to address current conditions. With the uncertainty of the U.S. Fish and Wildlife Service's listing of the greater sage grouse, habitat management recommendations have been in flux. As the life-of-project is estimated to be 30 to 50 years, with the majority of development and activities expected to occur within the first 20 years, project activities and authorizations are to be guided by the mitigation measures and monitoring plans included in the EIS and hereby made part of this decision (as attached). The use of best management practices, technology and research will be considered at the time APDs and other applications for authorizations are submitted. This measure will provide the BLM the flexibility to address habitat recommendations as they evolve.
- The purpose of and need for the exploring and developing the Desolation Flats oil and gas resources was to allow the proponents to access and development of their leaseholds, consistent with the Minerals Leasing Act of 1920 (MLA) and regulations 43 CFR 3100. The selected alternative meets the purpose and need for the proposed action.
- The adoption of the Proposed Action includes all practical means to avoid or minimize environmental harm. To ensure the environmental consequences of the field development activities will be minimal, the decision includes not only the required environmental safeguards and resource protection measures prescribed by the Great Divide and Green River RMPs, it also includes additional mitigation or protective measures identified in the DFPA Draft and Final EISs, as attached to this decision.
- Benefits from this alternative include the extraction of an estimated 1.1 trillion cubic feet of natural gas, positive economic effects on local economies, increased employment opportunities, improved road infrastructure and accessibility, and increased tax revenues for local governments.

- A primary goal of the National Energy Policy is to add energy supplies from diverse sources including domestic oil, gas, and coal in addition to hydropower and nuclear power. The BLM recognizes that the exploration and development of natural gas and oil resources is essential to meet the nation's future energy needs. As a result development of these Federal resources is integral to the BLM's oil and gas leasing programs under the authorities of FLPMA and the MLA.
- The BLM oil and gas leasing program encourages the development of domestic oil and gas resources and reduction of the United States' dependence on foreign sources of energy. The leasing and subsequent production of Federal oil and gas resources provides the United States, the State of Wyoming and affected local counties with income in the form of lease royalty payments. The alternative selected meets the goals of the National Energy Policy and achieves the objectives of the Federal oil and gas leasing programs managed by the BLM. This alternative is supported by the Wyoming Governor and other state and local officials.

The decision was made in full consideration to public, local, state, and other federal agency input. No substantial issues remain unresolved within the scope of this proposal, as raised by government agencies, industry, groups, or individuals.

PUBLIC INVOLVEMENT

On May 18, 2000 the BLM published in the <u>Federal Register</u> a notice of intent to prepare an environmental impact statement. Additionally a scoping notice was prepared and distributed to Federal, tribal, state and local governments, conservation groups, industry groups, and individuals May 24, 2000. The notice requested input and comments to the proposed Desolation Flats Natural Gas Field Development Project (DFPA). Public meetings to discuss the proposal were held in Rock Springs (June 7, 2000), and Rawlins (June 8, 2000) Wyoming. During the period of May 24, 2000 through June 23, 2000, 76 written responses were received by the BLM. These comments were used to determine the extent of analysis, issues and concerns, opportunities, and to develop alternatives to the proposed action. Chapter 6 of the Draft EIS contains a detailed list of those contacted under consultation and coordination. Issues and concerns generated are detailed in the Draft EIS on page 1-19 through page 1-22. Opportunities identified can be found at "1.7 Opportunities" on page 1-23. Alternatives identified and either dropped from detailed consideration or carried forward for analysis are discussed in Chapter 2 – "Proposed Action and Alternatives".

The Notice of Availability of the Draft Environmental Impact Statement for the Desolation Flats Natural Gas Field Development Project was published in the <u>Federal Register</u> April 25, 2003. With the publication of the EPA's Notice of Availability the following week, a 60-day review and comment period started, ending July 1, 2003. Formal public meetings to discuss the DEIS were held in Rock Springs (June 5, 2003), and Rawlins (June 4, 2003) Wyoming. During the comment period 188 written responses were received. The comments made on the Draft EIS were included in the Final EIS. Comments and BLM response are detailed in Section 5 of the Final EIS.

On May 28, 2004 the BLM published in the <u>Federal Register</u> a Notice of Availability of Final Environmental Impact Statement for the Desolation Flats Natural Gas Field Development Project for a 30-day review period. The review period commenced June 4, 2004 with the publication of EPA's Notice of Availability in the <u>Federal Register</u>. By the end of the comment period, July 6, 2004 the BLM had received 655 written comments by facsimile and electronic and conventional mail.

Most of the comments received were statements requesting the BLM select Alternative B – No Action. One commenter noted that a comment made to the Draft EIS was omitted in the Final EIS and did not receive a response from the BLM. The comment and response are provided in the "Errata" section. All comments that were received during the EIS process were considered in the preparation in both the Draft and Final EISs and in this Record of Decision.

ALTERNATIVES ANALYZED IN DETAIL

The EIS analyzed three alternatives in detail: the Proposed Action, Alternative A and Alternative B, No Action. These alternatives are summarized below. A full description of each alternative analyzed in detail may be found in Chapter 2 of the Draft EIS and incorporated into Final EIS.

Proposed Action (**Selected Alternative**)

The activities proposed by the proponents include 385 wells at 361 locations with a forecasted viability success rate of 65 percent. This would result in a total build-out of 250 producing wells. A supporting access and transportation system of up to 450 miles of upgraded and new roads; approximately 361 miles of pipelines; 4 compressor stations, one gas processing plant, 3 water evaporation ponds, 2 disposal wells and 10 water wells would be associated with the target number of well locations. Total short–term surface disturbance is estimated at about 4,900 acres. The proponents proposed 2 to 4 well locations per aliquot section dependent on the geological resources.

Alternative A

The original proposal made by the proponents was analyzed for impacts that might occur if all portions of the project area were explored for development. These additional wells would be located in the areas of the Desolation Flats Field that are marginally economical to uneconomical in an effort to maximize resource recovery. This alternative included 592 natural gas wells at 555 locations with a forecasted viability success rate of 65 percent. A supporting access and transportation system of up to 830 miles of upgraded and new roads; approximately 555 miles of new pipeline; 6 compressor stations, 2 gas processing plants, 4 water evaporation ponds, 3 disposal wells and 16 water wells would be associated with achieving the target number of well locations. Two to four well locations per aliquot section would be needed depending on the geological resources.

<u>Alternative B – No Action</u>

The development proposal made by the Operators would be rejected. The BLM would consider and review individual site-specific activities and facilities requested in APDs and other

application for use of public lands. Each proposal would be subject to NEPA process and analysis on a case-by-case basis.

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

Further descriptions of these alternatives may be found in Chapter 2 of the Draft and Final EIS.

Expanded Wilderness Alternative. The Rawlins Field Office (RFO) and Rock Springs Field Office (RSFO) received a proposal entitled "A Citizens' Proposal to evaluate lands surrounding the Adobe Town Wilderness Study Area (WSA) for Wilderness Status" (Citizens Proposal). All lands contained in the Citizens' Proposal are contiguous to the existing Adobe Town WSA. Lands contained in the Citizens' Proposal include public lands in both the RFO and RSFO that are within the DFPA. An alternative was considered to analyze the Citizens' Proposal to evaluate lands surrounding the Adobe Town WSA for wilderness status. This alternative was eliminated from further consideration and detailed study because the proposal would be more appropriately addressed within the context of the BLM's land use plan review process. A detailed discussion of eliminating this alternative from further consideration can be found in the draft EIS, section 2.6 "Alternatives Considered but Eliminated from Detailed Study", part 2.6.1 "Expanded Wilderness Alternative".

Required Directional Drilling: The BLM reviewed the request that some percentage of the wells proposed by the operators would be directionally drilled, and an alternative was considered that all wells be drilled from multi-well pads. Required directional drilling for all wells could reduce surface disturbance including roads, acres of disturbance from well pad construction and miles of pipeline to construct. However, experience drilling in similar formations has yielded insight into the opportunities and limitations of directional drilling. The Proposed Action and Alternative A both provide for directional drilling when practical; particularly when adverse topographic, cultural resource impacts, Historic Trail viewshed considerations, and avoiding habitats of threatened, endangered, or other sensitive species make it desirable. There is no limit to the number of directional / multi-pad wells that may be drilled, but mandating that every well, regardless of geologic or surface conditions must be drilled directionally is not reasonable. A detailed discussion of the rationale behind dropping this alternative from further consideration can be found in the draft EIS, section 2.6 "Alternatives Considered but Eliminated from Detailed Study", part 2.6.2 "Directional Drilling".

MITIGATION, COMPLIANCE AND MONITORING

Construction, drilling, and production operations will be routinely inspected by BLM personnel. In addition, each Operator may be required to have an Environmental Compliance Coordinator. The Environmental Compliance Coordinator will be responsible for assuring that mitigation measures are applied and monitoring activities are conducted as necessary to assure surface impacts are minimized. Operators and the BLM will provide qualified representatives on-site during construction to validate construction commensurate with the approved design.

The following provides a brief summary of how the transportation, reclamation, and wildlife protection plans provide for compliance, monitoring, and/or adaptive environmental management. The Reclamation Plan (Appendix A) involves components designed to protect or otherwise minimize impacts to many area resources including surface waters and groundwater,

vegetation communities, wildlife, livestock grazing, recreation, and visual resources. The process to assure appropriate reclamation is provided in Appendix A, Figure A-1.1. Reclamation monitoring will be the responsibility of both the BLM and the Operators. Monitoring will be accomplished through joint, coordinated monitoring efforts. Details on BLM/Operator monitoring responsibilities will be provided in site-specific plans. Monitoring protocol and success criteria are outlined in detail in the Sections A-6.2 and A_6.3 of Appendix A. Monitoring data will be compiled by the BLM to provide future guidance for successful reclamation.

The Wildlife Protection Plan (Appendix D) is designed to determine the extent of adverse effects, if any, occurring to sensitive wildlife resources, and in the event adverse effects are found, the plan calls for increased protection measures. Currently proposed techniques and associated responsibilities are shown in Appendix D, Tables D-2.1, D-2.2, and D-2.3. An annual review of wildlife monitoring techniques, and collected data will be conducted by BLM, Operators, WGFD, and USFWS. Annual reviews will help determine if protection measures have been adequate or if additional protective measures are required. To further specify responsibilities and commit financial obligations, a cooperative agreement among participating agencies and operators will be required.

RECOMMENDED ALTERNATIVE

I recommend that the Proposed Action as modified by the mitigation measures and best management practices would best meet the interests of the public and the proponents.

Acting Field Manager

BLM Rawlins Field Office

Date

· Michael R . Holbert

BLM Rock Springs Field Officer Manager

8

APPROVAL

Based on the recommendations of the Rawlins and Rock Springs Field Office Managers, I approve the decision to explore and develop the Desolation Flats Project Area by the Operators as described by the Proposed Action. Consistent with 43 CFR Part 3160 this decision will be in full force and effect commencing with the date it is signed by the authorizing officer.

Appeal Procedures. Under the regulations found at 43 CFR Subpart 3165, this decision may appealed by any adversely affected party to the Interior Board of Land Appeals. Procedures and timeframes for submitting an appeal of this decision are described at 43 CFR 3165.4 If an appeal is filed, the notice of appeal must be filed with the State Director, Bureau of Land Management – Wyoming State Office, P.O. Box 1828 Cheyenne, WY or delivered to BLM – Wyoming State Office, 5353 Yellowstone Road, Cheyenne Wyoming within 30 days of the date the BLM's Notice of Availability of this decision has been published in the Federal Register.

If you wish to file a petition for a stay of the effectiveness of this decision while your appeal is under review by the Board, the petition of stay must accompany your notice of appeal as required by the procedures and timeframes codified at 43 CFR 3165.4(c). Copies of the notice of appeal and the petition for stay must also be submitted to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Robert A. Bennett

Wyoming State Director

ATTACHMENTS

- 1. Index of mitigation measures by document and subject
- 2. Appendix A
- 3. Appendix B
- 4. etc

Index of Mitigation Measures by Document and Subject

Mitigation and Guidelines for monitoring are found in the following places for the draft and final EISs, and this ROD:

6.1 ROD

EIS Location		ROD	Title	
Appendix	A—Draft	A	Criteria for meeting "Acceptable Plan	
Appendix	B—Draft	В	Standard Mitigation Guidelines	
Appendix	C—Draft	С	Reclamation Plan	
Appendix	D—Draft	D	Hazardous Materials Management Plan	
Appendix	H—Draft	Е	Wildlife Monitoring/Protection Plan	
Appendix	A—Final	F	Formal and Informal Consultation for Desolation	
			Flats Project	

6.2 Draft EIS

Chapter 2 – Part 2.5.2.11 – Project Wide Mitigation Measures

Chapter 4 – Analysis of Environmental Consequences, Additional Mitigation Measures:

Part	Section	Page
4.2.5	Air Quality	4-29
4.7.5	Wildlife	4-72
4.8.1.4	TE & S Species	4-79

Part	Section	Page
4.8.2.4	Sensitive Species	4-90
4.13.5	Transportation	4-124

Appendix B – Standard Mitigation Guidelines

Appendix C – Reclamation Plan

Appendix D – Hazardous Materials Management Plan

Appendix H – Wildlife Monitoring / Protection Plan

6.3 Final EIS

Section 2: Addendum and Errata, Part 4.2.5 – Air Quality Appendix Cultural Resources Management

Because of the importance of mitigation for avoiding or minimizing adverse impacts, a monitoring program will be implemented by the Operators and BLM with input from interested state and other federal agencies. Mitigation and guidelines for monitoring are incorporated into the Proposed Action as applicant-committed measures in the draft EIS at Chapter 2 – Part 2.5.2.11 – Project Wide Mitigation Measures. Other mitigation and monitoring is detailed above.